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Figure 1: Range of life history characteristics for the selected species.  $M$  is natural mortality,  $k$  is von Bertalanffy's growth parameter,  $A_{\max}$  is maximum age and  $L_{\text{inf}}$  asymptotic length.

Figure 2: Graphical illustration of the amount of data provided to experts for four example species. Horizontal lines indicate the catch time-series and black dots the year of fishery length composition provided for each dataset.

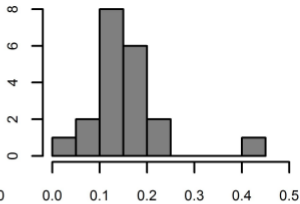
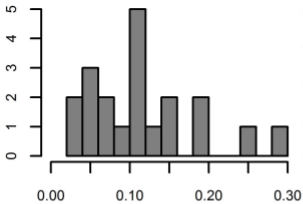
Figure 3: Median RE and IQR in logarithmic scale for the explanatory variables tested. Where for Stock Status the categorical levels are: 0= 0-0.2, 1= 0.2-0.5, 2: 0.5-0.7 and 3: 0.7-1, for expert Level the categorical levels are: 1= Experienced, 2= Novice and 3=Inexperienced, for Dataset the categorical levels are: 1= 30% catch +1LC, 2=30% catch +2LC, 3=100% catch +1LC and 4=100% catch +1LC, and for Life history are: 1=  $M/k \leq 0.4$ , 2=  $0.4 < M/k \leq 0.8$ , 3=  $M/k > 0.8$ .

Figure 4: Fitted values (points) and 95% CI (bars) of the expert level effect (Levels 1, 2 and 3) on the different levels of stock status (Levels 0, 1, 2 and 3) in logarithmic scale for median RE and IQR.

Figure 5: Expert performance for the 18 data-rich stocks in logarithmic scale. Panels (a) and (b) show experts of Level 1, being experienced in stock assessment, panels (c) and (d) show experts of Level 2, being novice in stock assessment and panels (e) and (f) show experts from Level 3, being inexperienced in stock assessment. The gradient legend indicates the model derived stock status for the selected stocks. Species are ordered from low to high relative stock status.

Figure 6: Individual expert performance for simulated stocks in logarithmic scale. Panel (a) shows performance for Rockfish and panel (b) performance for Sole. Rockfish stock status was 0.0354 and Sole stock status was 0.92 after 50 years of free exploitation simulation. Experts of group A (Expert1, Expert 3 and Expert 5) received rockfish as the first species and sole as the last species in the elicitation process and experts of group B (Expert 2, Expert 4 and Expert 6) vice versa.

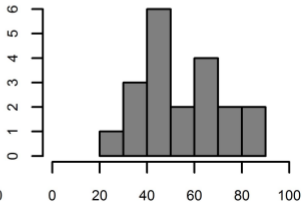
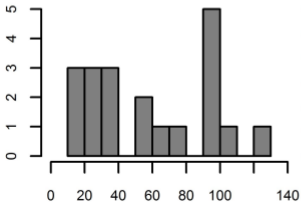
Figure 7: Expert calibration for full-data set. Assessed mean probability for stock status compared to stock "true" status. (a) Experienced experts, (b) Novice experts and (c) Inexperienced experts. The diagonal line indicates perfect expert performance and below or above the diagonal line, indicates under and over-estimation of stock status respectively. Locally weighted scatterplot smoothing (LOWESS) is illustrated with the gray line.



Frequency

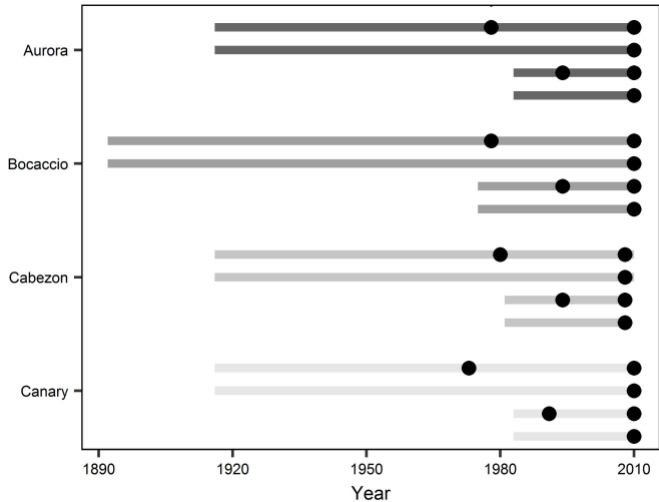
**M**

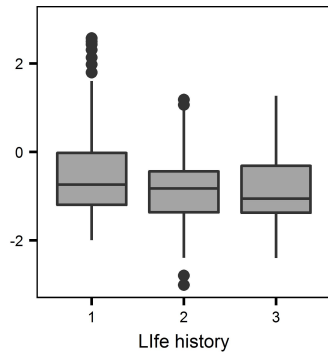
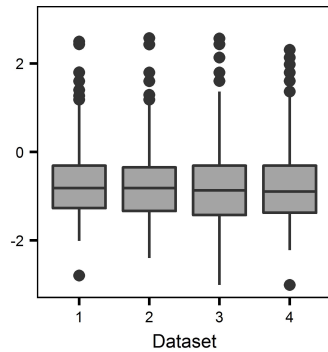
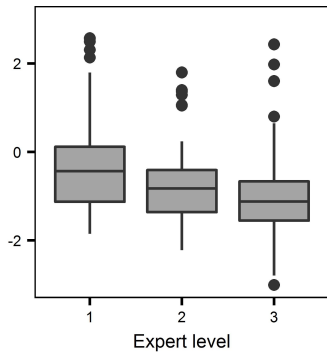
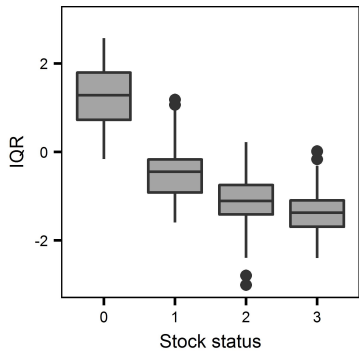
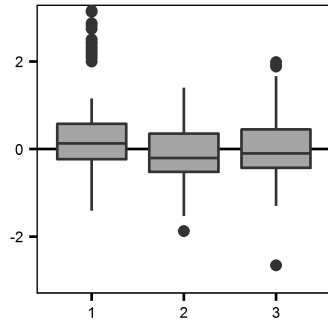
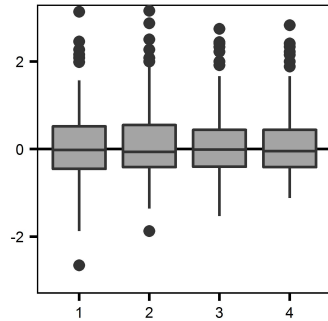
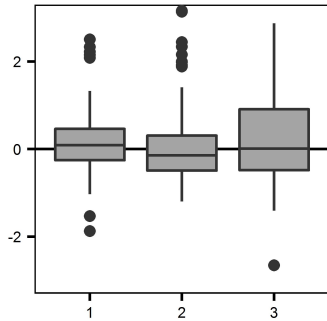
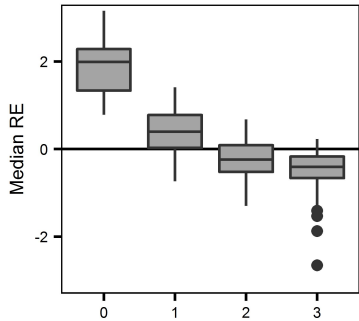
**k**

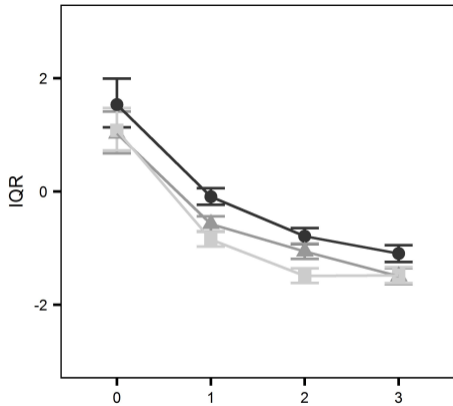
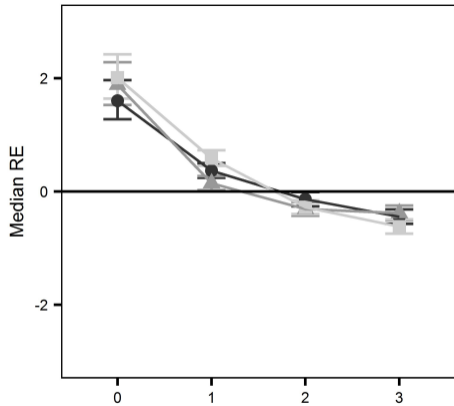


**Amax**

**Linf**



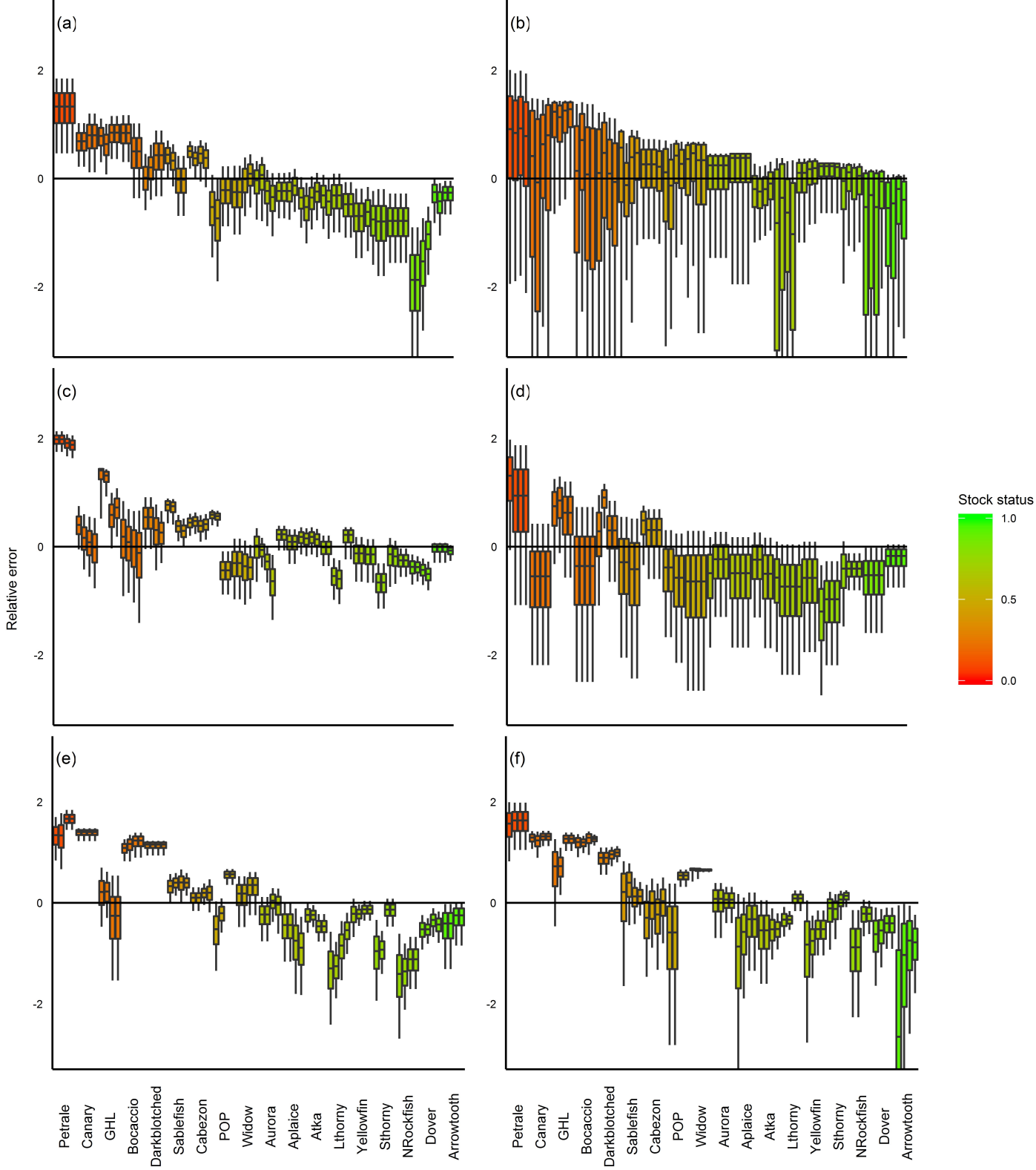




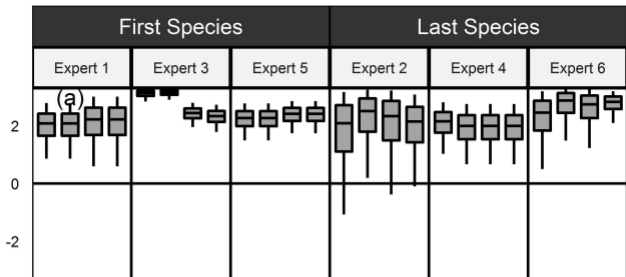
Level



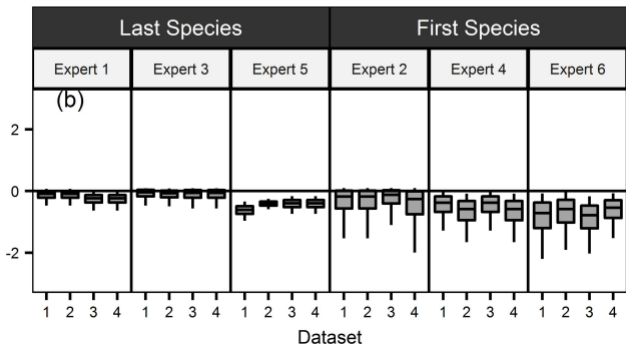
Stock status







Relative error



Assessed median stock status

